

produce rupture of the pulmonary vesicles. On the other hand, he was struck with the great force needed thoroughly to inflate the lungs, while their resiliency was sufficient to expel the greater part of the air. He found, moreover, in many cases where children had died suddenly after breathing for several hours or days, no other morbid appearance than an unexpanded condition of a large portion of the lungs. With reference to the mode of practising artificial respiration, he condemns the mere blowing into the mouth as inadequate, and recommends the use of a tracheal tube. He is of opinion that there is more danger of failing from imperfect insufflation than of doing harm by its too forcible performance. It is of importance, likewise, that it should not be suspended on the first sign of breathing, but continued until the child cries loudly and respire well.—*Ibid.*

62. *Diet in Infancy.*—Dr. KLENCKE* calls attention to the important deterioration which the milk of stall-fed cows undergoes, and is inclined to attribute the production of scrofula in children in many instances, to its direct transmission through the medium of that fluid. Although the direct production of scrofula by the contagious properties of the milk is assumed rather than proved in this pamphlet, still the fact is very important that stall-fed cows often become tuberculous, and that their milk loses much or even the whole of its sugar, that the butter and casein diminish, while albumen is found, sometimes in as high a proportion as 15 per cent., and elain in the proportion of 1·4 per cent., and that in some cases lactic acid is likewise present.

In a well-written paper on the subject of diet in children, Dr. MAROTTE† draws attention to the error often committed in placing infants on a spare diet, who have been observed not to thrive at the breast, but to suffer from diarrhœa, and to lose flesh. The real means of cure would consist in obtaining a wet-nurse for the child, and thus providing it with a more instead of a less nutritious food. Many instances of gastro-intestinal disorder in childhood depend, in his opinion, on the want of a more highly animalized diet. It is therefore, as a general rule, undesirable to dilute the milk of the herbivora, already poor in animal constituents; while in those cases where it is necessary to supply deficiency in the nutritive qualities of the nurse's milk, chicken or other broth, either alone or mixed with milk, should be used for that purpose.—*Ibid.*

MEDICAL JURISPRUDENCE AND TOXICOLOGY.

63. *Contested identity determined by the teeth.*—The following very curious case is related by Mr. A. S. TAYLOR, in his Lectures on Medical Jurisprudence, reported in the *London Medical Gazette*.

"It was a case which Mr. H. Reynolds and myself were called upon to investigate. It was a trial for murder, under circumstances in which the body was never discovered, and in which, as it happened, an important question of identity arose, founded on the presence of the incisor teeth in a female of advanced age.

"The case to which I allude is that of Elizabeth Ross, who was tried at the Old Bailey Sessions in December, 1831, for the murder of a female of the name of Caroline Walsh.

"It appeared, in evidence, that the deceased Caroline Walsh, who was an old Irishwoman, had been repeatedly solicited by the prisoner, to come and live with her and her husband, but the deceased refused. By much persuasion on the part of the prisoner, however, she at last consented, and went for that purpose to the prisoner's lodgings in Goodman's Field, on the evening of the 19th of August, 1831, taking with her her bed, and an old basket, in which she was accustomed to sell tape and other articles. From that evening all traces of the deceased were

* Ueber die Ansteckung und Verbreitung der Scrofelkrankheit bei Menschen durch den Genuss der Kumlch. Leipzig, 1846; and an abstract of it in J. f. Kinderkr., June, 1846.

† Journal de Médecine, August, 1845; and J. f. Kinderkr., March, 1846.

lost, and when the prisoner was required by her relatives to account for her disappearance, she prevaricated, but finally asserted that she had gone out early in the morning of that day, and had not returned.

"The testimony of the prisoner's son, who was the chief witness for the crown, went to prove most clearly, that the deceased had been wilfully suffocated on the evening of her arrival by his mother (the prisoner) placing her hands over the mouth of the deceased, and pressing on her chest. He deposed that on the following morning, he saw the dead body in the cellar of the house, and on the evening of the same day, he saw his mother leave the house with something large and heavy in a sack. *This was at the time murders were being perpetrated in London, to supply the Anatomical Schools with subjects for dissection.*

"Now it happened, most singularly, that on the evening of the 20th of August, the day following the alleged murder, an old woman, of the description of the supposed deceased, was found lying in the street in the immediate neighborhood, in a completely exhausted condition, and in a most filthy and squalid state. On being questioned, she stated that her name was Caroline Welsh, and that she was a native of Ireland. Her hip was found to be fractured, in consequence of which, she was conveyed to the London Hospital, where she subsequently died and was buried. The prisoner, Ross, when apprehended, insisted that this was the female whom she was accused of having murdered. Hence, setting aside the direct contradiction given to this statement by the evidence of her son, it became highly important for the ends of justice, that the identity or non-identity of the two women should be clearly established.

"The extraordinary resemblance of names, and the exact coincidence of time, struck every one in court, but by the examination of about twenty witnesses, the following points of difference were elicited. It was stated that they were both Irishwomen, but Caroline Walsh came from Kilkenny, Caroline Welsh from Waterford. The former, (the alleged murdered person,) was eighty-four years of age, tall, of a sallow complexion, gray hair, and had (an extraordinary circumstance for her years) very perfect incisor teeth. The latter, Caroline Welsh, (who died in the London Hospital,) was about sixty years of age, tall of stature, dark, like a mulatto, but had no *front teeth*, in addition to which it was deposed by a medical witness, that the alveolar cavities corresponding to them, *had been obliterated for a considerable time.* The witness brought the skull and jaw into court, for the body had been previously exhumed for examination, *but the judge would not allow it to be produced*, and said he would be satisfied with the witness' statement respecting the condition of the jaw.

"Other circumstantial points of difference were deposed to—as, for example, Caroline Walsh was healthy, cleanly, and neat, in her person, and her feet were perfectly sound; Caroline Welsh was considerably emaciated, in a dirty and filthy condition, her hip broken, her foot covered with bunions and excrescences, and one toe overlapped another.

"The dress of the two women was somewhat similar. That of Caroline Walsh was most clearly proved to have been sold by the prisoner, Ross, to different persons, and almost every article was reproduced in court, and sworn to by witnesses. The clothes of Caroline Welsh were proved to have been burnt by order of the parish authorities. Both of these women had similar baskets in their possession, but that of Caroline Walsh had no lid or cover, while that of Caroline Welsh had. Lastly, the body of the latter was taken up from the burial-ground of the London Hospital, for the purpose of identification, and it was sworn, by two of the granddaughters of Caroline Walsh, not to be the body of their grandmother.

"This is perhaps one of the most singular cases of disputed identity, that has come before a British court of law. We have a coincidence of name, time, place, age, occupation, and circumstances, so extraordinary, that but for two circumstances, it is probable, the prisoner would have escaped on the presumption of a mistake, the body of the deceased never having been found, although all the dissecting rooms in London were repeatedly searched for it. These circumstances were, 1st, that the relatives of the deceased swore, that the exhumed body was not that of the missing woman, and 2d, the medical proof of the entire obliteration of the alveolar cavities in the jaw of the exhumed body, proving that the incisor teeth must have been lost long before death, while several witnesses testified to the

presence of these teeth, as a striking peculiarity in the missing female. Even had the features of the exhumed female been obliterated by putrefaction, the non-identity would have been established by this medical fact.

"The prisoner was convicted and executed."

T. R. B.

64. *Blake on Poisons*.—The following are extracts from the *Athenæum Report of the Meeting of the British Association* at Southampton, in September last. The discrepancies are certainly extraordinary. It is to be hoped that Dr. BLAKE will publish his observations in full.

Sect. 16. Sect. B. Chemistry.—"On the connection between the isomorphous relations of the elements, and their physiological action," by J. Blake. In a paper read before the Academy of Sciences at Paris, the author remarked, "that when introduced directly into the blood, the salts of the same base appear to exert the same effect on the animal economy." Since that time, further researches have led to the discovery of a law, equally interesting under a chemical as under a physiological point of view. The law alluded to, is, that when introduced into the blood, all isomorphous substances produce analogous effects, and give rise to the same reactions in the animal economy. This law has been verified, by an extended series of experiments with the salts of magnesia, lime, manganese, iron, cobalt, nickel, zinc, cadmium, copper, bismuth, lead, baryta, strontia, soda, silver, potash, ammonia, palladium, platinum, osmium, iridium, antimony, the acids of phosphorus, arsenic, bromine, chlorine, iodine, sulphur, and selenium. One of the facts observed, is, the connexion which exists between the physiological action of these substances, and their isomorphous relations to the elements of the blood. It is found that those substances which exist in the blood, or have isomorphous relations with its elements, have the least marked reactions; thus phosphoric and arsenic acids can be introduced into the veins without producing any marked phenomena, whilst, on the other hand, those elements which are most distinct in an isomorphous point of view, from the constituents of the blood, are those which give rise to the most marked phenomena. *Two drachms of arsenic acid, injected into the veins, will produce no marked effect on any organ*, but a grain of chloride of palladium, or two grains of nitrate of baryta, are sufficient instantly to arrest the movements of the heart. Several other instances, analogous to those quoted, were pointed out.

Sect. E. Physiology.—"On the Physiological Action of Medicines," by Dr. J. BLAKE. This report was in continuation of the same subject, reported on at previous meetings of the Association, and contained a series of experiments to investigate the action of the salts of iridium and osmium, and of the acids of selenium and sulphur, on the animal economy. The salts of iridium, when injected into the venous system, destroy life by diminishing the force of the heart's action, and when injected into the arterial system, the capillaries are impeded, and the heart's action is much increased, to overcome the resistance. The action of the salts of osmium is exactly analogous to those of iridium, and to that of other members of the same isomorphous group. The effects produced by selenic and sulphuric acids, when introduced into the blood, are not striking, not appearing to act in a manner, on *any one organ*. They agree in this with other bodies which either enter into the composition of the blood, or have isomorphous relations with it. The experiments with these substances were given in detail. In conclusion, the author enumerated the new law in organic chemistry, which he derives from the series of researches which this report concludes, viz., that the reactions which take place between the elements of the living body and inorganic compounds, are not governed by the ordinary chemical properties of these substances, but depend on certain properties they possess connected with their isomorphous relations. This law, he contended, opens up a new point of view, to conduct our organic chemical inquiries from, and satisfactorily accounts for the failure which has constantly attended attempts to explain the chemistry of animal life, by analogy from ordinary chemical phenomena.

T. R. B.

65. *Delirium Tremens in an infant*.—A little boy, five years of age, swallowed by mistake a large quantity of brandy. Vomiting speedily followed, and he passed a restless night, sleeping only toward morning. On awaking, it was observed, that